



Guidance Document Development and Review Process

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Purpose

This document provides an outline of the process for development and review of information management guidance documents for the North Coast and Cascades Network (NCCN). Information management guidance documents cover a wide range of topics – including GPS use, specifications for spatial and non-spatial databases, reporting guidelines, guidance on the management and use of national database applications, archival of project documents, and systems backups for information technology resources. This document is intended to clarify the process for coordinating collaborative development, review and implementation of network guidance documents.

Scope and Applicability

The procedures within this document should be consulted and followed whenever new guidance documents are being developed, and as existing documents are modified. The intended audience for this document is primarily those involved in developing and reviewing data management guidelines and specifications. This will typically include members of the NCCN GIS & Data Management Team: Data Managers, GIS Coordinators, GIS Specialists, Cartographic/Data Technicians, and data management volunteers. However, certain information management guidance documents may also require input and review from members of the network user group, such as Network Coordinator, park Division Chiefs, Resource Managers and other park & network staff.

Definitions and Acronyms

<i>Approved/implemented</i>	Document status indicating that the document has been reviewed and approved for implementation
<i>Doc_status</i>	A field on the team website that indicates the status of the guidance document: source material, draft, or approved/implemented
<i>Draft – full review</i>	Status of a draft document indicating that it is ready for and/or currently undergoing full review by members of the technical committee and/or other members of the network user group
<i>Draft – internal review</i>	Status of a draft document indicating that it is ready for and/or currently undergoing review by members of the GIS & Data Management Team
<i>Draft – under development</i>	A draft guidance document that is currently being developed by one or more members of the information management work group
<i>GIS</i>	Geographic Information Systems. A computer system for storing, manipulating, analyzing and displaying spatial data. Software typically used by NPS includes ArcInfo, ArcView, ArcGIS (ArcMap, ArcCatalog, ArcToolbox), and ArcIMS.
<i>GIS & Data Mgmt Team</i>	Network staff whose primary duties are to facilitate information and data management or to provide GIS support
<i>I&M</i>	Inventory & Monitoring Program of the National Park Service
<i>NCCN</i>	North Coast and Cascades Network: http://www1.nature.nps.gov/im/units/nccn
<i>NPS</i>	National Park Service
<i>Review deadline</i>	A field on the team website to indicate the end date of the review period

<i>Source material</i>	Source materials can be posted on the team website – including documents from other organizations and related materials from our network
<i>Team website</i>	Collaborative intranet website for the NCCN GIS & Data Management Team

Overview

The general sequence of steps in developing and posting documents for review is as follows:

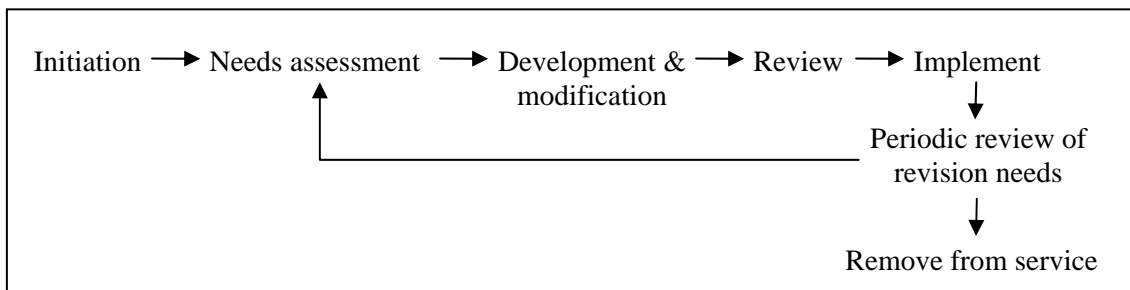


Figure 1. Guidance document life cycle diagram.

To facilitate communication and collaboration, guidance documents are maintained on an intranet website based on Microsoft Windows SharePoint Services. This platform has capabilities for version control, document check-out, and document attributes that permit users to categorize and sort documents in different ways. Developers are encouraged to use this collaborative tool to share and maintain documents at all stages of development. This will help to make the most recent version of documents available to everyone in a safe, backed up environment.

Procedures and General Requirements

Initiation and Needs Assessment

Guidance documents are initiated when one or more members of the NCCN GIS & Data Management Team find a need for a particular set of guidelines to facilitate information management at the park or network level.

1. Raise the issue by notifying other members of the NCCN GIS & Data Management Team. Articulate the need for guidance with enough specificity for the group to be able to identify who might be best suited to complete the guidance and to prioritize relative to other work load commitments.
2. The group should then meet to define the scope and assess the needs for the guidance document. This should include involvement by as many members of the NCCN GIS & Data Management Team and network user group as is practicable. The group will address the following concerns:
 - A. Whether or not to proceed with guidance document development.
 - B. Whether development will lead to an entirely new document, or the revision of an existing document.
 - C. Assign a steward who will bear primary responsibility for the task of developing or revising the document and seeing it through review and implementation. Others who will assist in development can also be identified
 - D. Determine the priority for development or revision (high, intermediate, low) and the timeframe for completion.
3. The document steward will then create a new record or update an existing record on the team intranet website (hereafter “team website”). Under Guidance Documents List, fill out all the relevant

attributes (e.g., document steward, title, timeframe, priority). See Appendix 1 for details on how to create a new list item.

Development and Modification

The document steward may then proceed with development:

4. Assemble source material related to the topic (e.g., from other networks and/or levels within NPS). Source material can be posted on the team website for others to use during development (Appendix 2). Upon posting source documents, select the category of “source material” under Doc_status.
5. Create the draft document and post it to the team website under the “Guidance Documents” document library. Note: The document template is also built into the team website, so that new documents created within this library will be based upon the template. See Appendix 3 for details.
 - A. Upload the document to the appropriate folder under “Guidance Documents”
 - B. Documents should be given a file name that follows naming conventions in use by NCCN (i.e., avoid special characters, use underbars instead of spaces). The file name should be a legible abbreviation of the title, typically similar to the title of the folder in which it is placed.
 - C. All documents generated by NCCN parks should be given a file name prefix of “NCCN_”, unless the scope is explicitly limited to a single park, in which case the appropriate 4-letter park code should be used instead. Document titles do not require the NCCN prefix.
 - D. Upon creating or uploading a new document, select the appropriate category for “Doc_status”. Preliminary drafts should be given a Doc_status of “draft – under development”.
6. Work with other team members to develop the document. Refer to Appendix 4 for tips on using the collaboration features of the team website.

Internal Review

7. Once the document is ready for the first round of review, change the document status selector to “draft – internal review”, and set the review deadline. To allow for sufficient internal review, allow a period of 10-14 days for all but the highest priority documents.
8. Notify the group by email of the review period for the document.
 - A. The following positions should be notified of the internal review period: Data Managers, GIS Coordinators and Specialists, Data Technicians (including GIS/Cartographic technicians), and the Network Coordinator.
 - B. Regional GIS staff may be encouraged to participate in the internal review, especially if the document has direct implications for GIS data management.
 - C. Other individuals may be included in this first review period if they have a particular interest in the implementation of the guidance document, or if they were involved in its development.
9. During the internal review period, document stewards have the option of either inviting reviewers to make modifications within the document itself on the team website, or to send out a copy of the document for others to modify and return to the steward. In either case, the steward should make his/her choice clear to reviewers, and reviewers should always use the Track Changes option within Microsoft Word prior to making any changes. If the document steward asks reviewers to make modifications on the team website, the reviewers should notify the steward when their comments have been posted.
 - A. The advantage of having reviewers make modifications on the team website is that later reviewers will be able to see the comments of others while reviewing the document. This may stimulate consideration of issues that were not in the original review draft.
 - B. The disadvantages include lack of clarity about which changes will be accepted by the steward, and the possibility that document modifications by one reviewer may get undone by another.

10. Document stewards should incorporate minor revisions and comments in a timely manner. If substantial revisions were made or needed, there may be a need to go through another iteration of internal review so that all reviewers have another chance to see significant changes.

Full Review

If members of the GIS & Data Management Team think that a full review by the NCCN user group is merited, the steward should follow the same steps as for internal review, with the following minor exceptions:

- Rather than having reviewers make comments in the master document on the team website, a review copy should be mailed out to all reviewers.
- The NCCN Coordinator may play a larger role in deciding who should be included in the review, and may decide to postpone a review period based on the current work load of network staff.

Approval and Implementation

Once the document has been reviewed, the GIS & Data Management Team meets (usually by phone or email) to ratify the document. Ratification involves a Yes/No/Abstain vote by members of the group. Group members unable to attend the meeting may vote by sending their preferences by email to other members of the group in advance of the meeting. Ratification occurs only if there aren't any 'No' votes. 'No' votes should be accompanied by a brief justification to help the team to proceed with development.

Upon acceptance, the steward then proceeds with the following final steps:

11. Update the "Effective date" indicated at the head of the document, and verify that reference citations and website hyperlinks are valid. All references to related NCCN guidance documents should refer to the general web page for guidance documents, rather than establishing direct links to the documents that are more likely to become outdated over time. All references should point to the following address: http://www1.nature.nps.gov/im/units/nccn/dm_docs.htm.
12. Change the Doc_status to "approved & implemented", and update the record for the document under the Guidance Document List.
13. Create a PDF copy of the document, and post it to the NCCN public website.
14. Notify the GIS & Data Management Team and the NCCN Coordinator of document availability.
15. Delete older versions of the document from the version history on the team intranet website, if desired (see Appendix 4, View Document Version History). At this point, the team website version of the document remains the master copy.

Periodic Review of Implemented Documents

On some reasonable rotation schedule (to be determined but approximately every few years), guidance documents should be reviewed by the group and evaluated for currency and continued need. Documents that are no longer needed should be placed in archives and removed from the public website. Documents in need of revision should remain in service until a new version can be implemented. However, if the existing guidance leads to confusion or jeopardizes data quality and security, then the document should be removed prior to issuing a new version. Revisions to a document should be summarized in the Revision History section of the document. As implemented documents are revised and replaced, new PDF copies should be posted to the NCCN public website, and outdated versions should be placed in document archives.

Responsibilities

Guidance Document Steward: The person creating or modifying the guidance document is responsible for posting the document to the team website, developing the document within the timeframe agreed upon by the group, and maintaining the document during all phases of development, review and

implementation. Upon approval and implementation, the steward will post the document to the NCCN public website and will continue to act as the point-of-contact for questions about the guidance contained in the document.

Other Members of the GIS & Data Management Team: Other members of the team may be asked to take on a minor or major role in developing certain guidance documents. During the review process, team members should provide feedback to the steward within a reasonable timeframe. Upon approval and implementation, team members are responsible for following and applying the guidelines as needed to complete their work. If there are problems or concerns about the guidance contained in a particular document, users are responsible for raising these issues with the document steward and other members of the GIS & Data Management Team.

Other Members of the Network User Group: Members of the user group may be asked to provide feedback during development and review of certain guidance documents, which they should provide within a reasonable timeframe. Upon approval and implementation, members of the user group are responsible for making a good faith effort to follow accepted guidelines. If there are problems or concerns about the guidance contained in a particular document, users are encouraged to raise these with the document steward and/or other members of the GIS & Data Management Team.

Recommended Citation

North Coast and Cascades Network – National Park Service. 2005. Guidance Document Development and Review Process. USDI National Park Service.

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Ebey's Landing National Historical Reserve

Please refer to contacts for North Cascades NP

Fort Vancouver National Historic Site

Please refer to contacts for Mount Rainier NP

Lewis and Clark National Historical Park

Please refer to contacts for Mount Rainier NP

San Juan Island National Historical Park

Please refer to contacts for North Cascades NP

Reference Documents

Related Guidance

- North Coast and Cascades Network – National Park Service. 2005. Template for Information Management Guidance Documents. USDI National Park Service.

Revision History

Revision Date	Description of Change	Author	Effective Date
Mmm dd, yyyy		Full name	Mmm dd, yyyy

Appendix 1. Creating a New Guidance Document Item on the Team Website

1. From anywhere on the team website, select “Documents and Lists”, then open “Guidance doc list”.
2. Select “New Item”

GIS & Data Management Team Website
Guidance doc list

Select a View: **New Item** | Filter | Edit in Datasheet

Group by posted status
Group by priority & date
Group by steward

Actions:
Alert me
Export to spreadsheet
Modify settings and columns

File Name	Posted	In template	Priority	Timeline	Folder Name	Steward	Co-developers	Developer Comments
Steward : Ron Holmes (5)								
Posted : yes (3)								
NCCN_Report_Formatting_Guidelines	yes	yes	High	7/15/2005	Report_Guidelines	Ron Holmes	John Boetsch	In Template ready for internal review
NCCN Sensitive Information Guidelines	yes	yes	High	7/20/2005	Sensitive Information	Ron Holmes	John	In Template ready for internal review
NCCN Reporting Process	yes	no	Low		Report Guidelines	Ron Holmes	John	document might focus on peer review process, stage in project for reporting, etc., but not on formatting
Posted : no (2)								
NCCN File Naming Conventions	no		High	7/29/2005	Naming Conventions	Ron Holmes	John	
NCCN Voucher Guidelines	no		Intermediate	8/17/2005	Voucher Guidelines	Ron Holmes		

3. Fill out attributes for the new list item given what was agreed upon by the group.

GIS & Data Management Team Website
Guidance doc list: New Item

Save and Close | Attach File | Go Back to List

File Name:

Posted:

In template:

Priority:

Timeline: Enter date in M/D/YYYY format.

Folder Name:

Steward:

Co-developers:

Developer Comments:

Document Title:

Title Verified:

Description:

Development Ideas:

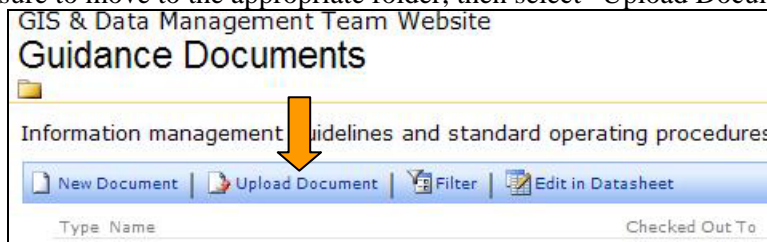
- File name – name of the file
- Status – indicates the status of the document (approved & implemented, in progress, not yet posted)
- In template – the document is using the NCCN document template (Yes/No)
- Priority – development priority (low, medium, high)
- Timeline – timeframe for development
- Folder name – subfolder where the document can be found
- Steward – name of the person with primary responsibility for the document
- Co-developers – others involved in development
- Developer comments – comments on the status of development
- Document title – title of the document, for use in reference citations
- Title verified – the steward has verified that this is the actual title used in the document (Yes/No)
- Description – description of the document
- Development ideas – details about the document concept

Appendix 2. Uploading Documents to the Team Website

1. From anywhere on the team website, select “Documents and Lists”, then open “Guidance Documents”.
2. Select the view called “All documents in folders”.



3. Be sure to move to the appropriate folder, then select “Upload Document”.



4. Browse to the file to be uploaded, and fill out the attributes for the document (steward, document status, priority, and target date). For documents that are ready for internal or full review, set the review deadline. To allow for sufficient internal review, set a review period of 10-14 days for most documents.

The screenshot shows a form for uploading a document. At the top are buttons for 'Save and Close' and 'Go Back to Document Library'. The form includes the following fields and options:

- Overwrite existing file(s)?**: A checkbox that is checked.
- Name ***: A text input field with a 'Browse...' button next to it.
- Upload Multiple Files...**: A link below the name field.
- Steward**: A dropdown menu.
- Doc_status**: A dropdown menu with 'source material' selected. Below it is the text 'Status of the guidance document'.
- Review deadline**: A date input field with a calendar icon. Below it is the text 'Target date for the end of the review period'.
- Priority**: A dropdown menu. Below it is the text 'Priority for development, determined by GIS-DM team'.
- Target date**: A date input field with a calendar icon. Below it is the text 'Timeline for completion of draft document'.

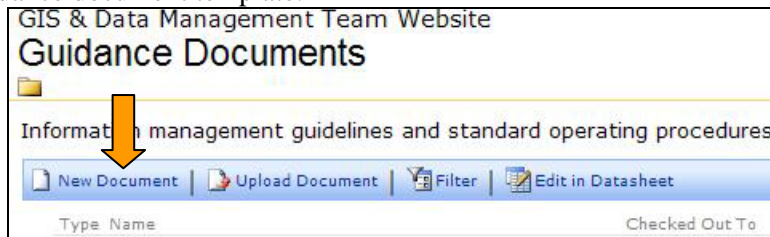
At the bottom, a note states: '* indicates a required field'.

Appendix 3. Using the NCCN Guidance Document Template

1. From anywhere on the team website, select “Documents and Lists,” then open “Guidance Documents”.
2. Select the view called “All documents in folders”.



3. Be sure to move to the appropriate folder, then select “New Document”. This will open the NCCN guidance document template.



4. After making edits to the new document, save it to the team website and give the file an appropriate name (e.g., “NCCN_Database_Specifications.doc”). Upon saving, the website will prompt to fill out the attributes for the document.

GIS & Data Management Team Website
Guidance Documents

Steward	<input type="text"/>
Doc_status	<input type="text" value="draft - internal review"/>
	Status of the guidance document
Review deadline	<input type="text"/>
	Target date for the end of the review period
Priority	<input type="text" value="high"/>
	Priority for development, determined by GIS-DM team
Target date	<input type="text"/>
	Timeline for completion of draft document

Appendix 4. Working on Documents in a Collaborative Environment

Option 1 – Check out the file, make changes, and check the file back in. (Preferred option)

Check out enables users to lock a file while editing to prevent others from overwriting it or editing it inadvertently. Only the user who checks out a document can edit the document. Check in releases the lock for editing and enables other users to view or check out the updated file. Another advantage of going through the check out process is that it makes it obvious to others that the document is currently undergoing edits by indicating the name of the person to whom the document is checked out in the standard “Checked Out To” column of the document library view.

Option 2 – Open the file and save edits under the same name on Team Website.

This option does not accomplish the desired objective of locking the document during editing by users, and letting others in the group know that the document is being edited by others. This opens the possibility of conflicting changes being made by multiple users.

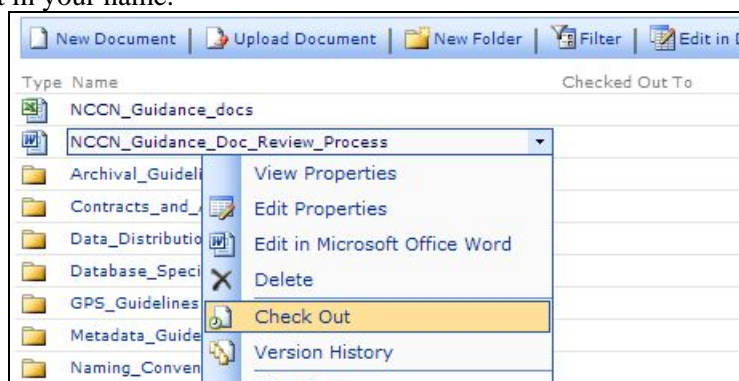
Option 3 – Download the file and work on a local copy. Upload the file under the same name and check the box to indicate overwriting the existing file (this is the default).

In addition to the risks noted for option 2, this option runs the following added risks:

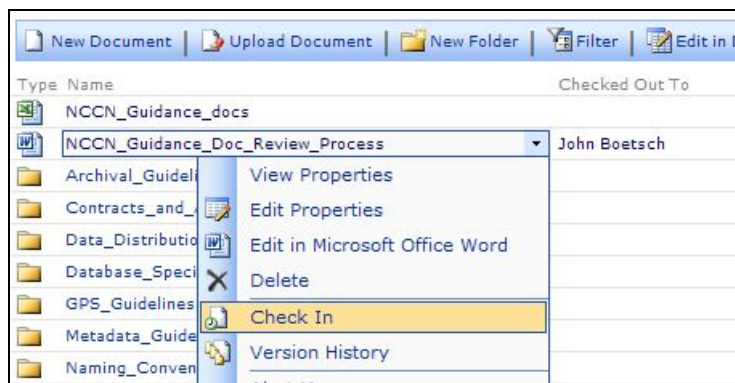
- the file name may change between download and upload
- the person downloading and editing may not remember to upload again in a timely manner
- although this option allows the user to work on a document for a longer period of time, this makes it more likely that others will download and edit or use an older version, increasing the likelihood of change conflicts and lost edits.

Procedures for File Check-out

1. To check a document out, right click on the pull down menu associated with the guidance document. Select the “Check Out” option. Note that this option will not be available if the document is already checked out to someone else. The website will then refresh and you will see that the document is checked out in your name.



2. To check the document back in, either do so within the software (Microsoft Office – File > Check In), or right click on the pull down menu associated with the document, and select the “Check In” option (see below). **Important:** If working on an offline version of the document, the changes you made will not be saved to the website unless you upload the document separately and write over the original. See Appendix 5 for details.



3. Upon check-in, a popup screen will appear. Select the first option and add comments as appropriate to help others to distinguish among document versions.

Viewing Document Version History

1. To view the version history for a document, right click on the pull down menu associated with the document, and select the “Version History” option. Each version has its own options (viewing, restoring, or deleting), which can be seen by right clicking on the pull down menu to the right of each.

X Delete Previous Versions Go Back to Document Library				
No.	Modified ↑	Modified By	Size	Comments
7	3/17/2005 11:03 AM	PWR\jboetsch	51 KB	Added citations to the reference section and updated the order of procedures
6	3/17/2005 10:55 AM	PWR\jboetsch	51 KB	
5	3/17/2005 10:19 AM	PWR\jboetsch	49 KB	
4	3/17/2005 10:17 AM	PWR\jboetsch	49.5 KB	
3	3/14/2005 4:49 PM	PWR\jboetsch	49.5 KB	version history retained upon upload/replace?
2	3/14/2005 4:23 PM	PWR\jboetsch	49.5 KB	
1	3/11/2005 2:00 PM	PWR\jboetsch	49.5 KB	

Appendix 5. About Document and Picture Library Versioning

Source: Microsoft Windows SharePoint Services help files.

Document versioning allows you to keep multiple versions of a document. If a change needs to be reversed, you can restore the previous version and continue working. When versioning is turned on, a **Version History** command is added to the drop-down list that users see when they click the arrow next to a document name (and the toolbar) in the Edit Properties page for the document. The **Version History** command is also available in client applications that are compatible with Microsoft Windows SharePoint Services, such as Microsoft Office Word 2003, Microsoft Office Excel 2003, and Microsoft Office PowerPoint 2003. When the user clicks **Version History**, a list of the previous versions of the document appears. The user can open an old version, restore a version (replacing the current version), or delete an old version.

Important: When a file is deleted from a library, all previous versions are deleted as well.

Versions can be created for all file types except HTML files that contain images or embedded objects. If you want to create versions as HTML, you must use the MHTML format (often saved as .mht) when saving to this Website. This also applies to those files on the Website that you check out and modify. When versioning is enabled, versions are automatically created whenever a user updates a document in a document library. Versions are created in the following situations:

- When a user checks out a file, makes changes, and checks the file back in.
- When a user opens a file, makes changes, and then saves the file for the first time.

Note: If the user saves the file again, without closing the file, a new version is not created. If the user closes the application he or she is using to edit the file, and then opens it and saves the file again, another version is created. If the user is prompted to save changes, s/he should indicate no if no intentional changes were made.

- When a user restores an old version of a file (and does not check it out).
- When a user uploads a file that already exists, in which case the current file becomes an old version.

Members of the Administrator and Web Designer site groups for a site can determine whether document versioning is enabled for a particular document library. To enable document versioning, you use the settings page for that document library.